ABSTRACT OF THE DISCLOSURE

A table searching system for facilitating high speed linear searching of a table of information by a plurality of searching agents is provided. The system includes: a memory unit for storing a table of information including a plurality of data entries each having data contents; a plurality of searching agents each being communicatively coupled with the memory unit, and having a port for receiving an associated search key value; and a memory controller unit providing a centralized interface between the memory unit and each of the agents, the controller unit being operative to control the memory unit to provide the contents of a current one of the table entries to each of the agents during each of a plurality of cycles of operation. Each of the searching agents is operative to determine an associated best matching one of the data entries based on comparisons between the associated key value and the contents of the data entries provided by the memory unit.